

REMARKS

Applicant submits this Reply to the Office Action mailed December 26, 2007. By this Reply, Applicant has amended claim 7. Accordingly, claims 1-12 remain pending in this application. The originally-filed application fully supports the subject matter of amended claim 7. Thus, the Reply introduces no new matter.

In the Office Action, claims 7-9 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office Action stated that the recited "neural network model" in line 11 of claim 7 is indefinite because "it is unclear whether the 'neural network model' is referr[ing] to the 'separate neural network model' recited in line 6 or the delivered 'neural network model' recited in line 5." Office Action at 2. Applicant has appropriately amended independent claim 7 and requests withdrawal of the Section 112, second paragraph, rejection.

In the Office Action, claims 1-12 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,199,018 to Quist et al. ("Quist"). Applicant respectfully traverses the rejection for the reasons provided below.

Quist cannot anticipate claims 1-12 because Quist does not disclose or even suggest each and every element of the claims. Prior art anticipates a claim only if each and every element as set forth in the claim is found described in the prior art reference. M.P.E.P. § 2131. For example, Quist fails to disclose or suggest, among other things, "comparing the data from the at least one test machine to corresponding data of the model development machine; and updating at least one of an estimator and a model of

each at least one test machine in response to variations in the compared data,” as recited in independent claim 1.

Quist discloses “[a] distributed diagnostic system in which a plurality of local monitoring devices collect local information concerning various machines and process that information, according to redefined diagnostic parameters, for diagnostic purposes.” Quist, Abstract. Quist further discloses that “each global neural network running on site processor 14 will have weighting parameters that are initially determined from accelerated testing data but that are refined, over time, in response to actual field collected data.” Quist, col. 19, ll. 11-15. The Office Action alleges that the above disclosure of Quist discloses “comparing the data from the at least one test machine to corresponding data of the model development machine,” as recited in claim 1. See Office Action at 4. Applicant respectfully disagrees.

Quist discloses a process for refining global neural network. For example, Quist adds that “[t]hese globally updated weighting parameters may then be downloaded to the local monitoring devices at various intervals to further enhance the local monitoring devices['] ability to predict the lifetime of the machine to which it is attached.” In other words, Quist *refines* globally updated weighting parameters and downloads the parameters to local monitoring devices. In contrast, independent claim 1 “*compar[es]* the data from the at least one test machine to corresponding data of the model development machine; and updat[es] at least one of an estimator and a model of each at least one test machine *in response to variations in the compared data*” (emphasis added). Quist does not disclose or even suggest, at least, this feature. Accordingly, Quist fails to disclose each and every feature of independent claim 1. Withdrawal of the

Section 102(e) rejection of claim 1 and its dependent claims 2-6 is respectfully requested.

With respect to independent claim 7, Quist fails to disclose or even suggest, among other elements, “determining a computed parameter on the test machine; estimating the parameter on the test machine with the delivered neural network; comparing the computed parameter with the estimated parameter; and updating at least one of an estimator and the delivered neural network model on the test machine in response to variations in the computed parameter and the estimated parameter.” The Office Action alleges that Quist discloses “comparing the computed parameter with the estimated parameter” at col. 19, lines 3-11. Office Action at 6. Applicant disagrees.

Quist discloses that “[e]ach such neural network will initially operate according to weighting parameters established from accelerated test data but will also be adapted to receive the field-collected data from the local monitoring devices 12 and use such field collected data to update the weighting parameters.” Quist, col. 19, ll. 3-8. That is, Quist describes updating neural networks with data collected from local monitoring devices. In contrast, claim 7 recites “*comparing* the computed parameter with the estimated parameter” (emphasis added). Quist does not disclose or even suggest this feature. Accordingly, Applicant respectfully requests withdrawal of the Section 102(e) rejection of claim 7 and its dependent claims 8 and 9.

Regarding independent claim 10, Quist fails to disclose or even suggest, among other things, “determining a level of variability of the characteristics of each machine as a function of the data; determining a level of variability of the operations of each machine relevant to a respective work site as a function of the data; [and] determining

an aging factor of each machine as a function of the data.” The Office Action alleges that Quist discloses “determining a level of variability of the characteristics of each machine as a function of the data” at col. 8, lines 14-18 and col. 5, lines 27-31. Applicant disagrees.

Quist discloses that “the microprocessor 28 is adapted to receive as inputs information provided from a sensor set that is adapted to sense various operating parameters of the machine 11.” Quist, col. 8, ll. 14-17. Quist further discloses that “[s]ome or all of the local parameters generated by these local monitoring devices 12 will then be communicated to the personal computer 14 which can use these local parameters to generate ‘site-wide’ updated parameters for feedback to the local monitoring devices 12.” Quist, col. 5, ll. 27-31. Contrary to the allegations in the Office Action, none of these disclosures disclose or even suggest “determining a *level of variability* of the characteristics of each machine as a function of the data” (emphasis added).

Notwithstanding the above discussion, which is sufficient for the withdrawal of the rejection of independent claim 10 and the allowance of the independent claim, claim 10 recites further features that are also not disclosed or suggested by Quist. The Office Action further alleges that Quist discloses “determining a level of variability of the operations of each machine relevant to a respective work site as a function of the data” and cites to col. 8, lines 19-26 and col. 5, lines 27-31. Applicant disagrees. Quist discloses that “RTD transducers are positioned to detect the temperature of the windings of machine 11, the temperature of the machine housing, and/or the temperature of the environment in which machine 11 is operating.” Quist, col. 8, ll. 23-

26. That is, Quist discloses sensing temperature. Quist does not disclose or even suggest the above feature of independent claim 10. Thus, the foregoing provides a separate, independent basis for the allowance of independent claim 10.

The Office Action also alleges that Quist discloses “determining an aging factor of each machine as a function of the data” and cites to col. 16, lines 55-60 and col. 5, lines 27-31. Applicant disagrees. Quist discloses that “[a]nother important operating parameter that may be monitored by the local monitoring device 12 is the total elapsed running time of the electric machine.” In other words, Quist discloses monitoring running time. Quist does not disclose or suggest “determining an aging factor.” Accordingly, Applicant respectfully requests withdrawal of the Section 102(e) rejection of claim 10 and its dependent claims 11 and 12.

The Office Action contains characterizations of the claims and the related art with which Applicant does not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization in the Office Action.

In discussing the specification, claims, and drawings in this Reply, it is to be understood that Applicant is in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract and/or shown in the drawings. Rather, Applicant is entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

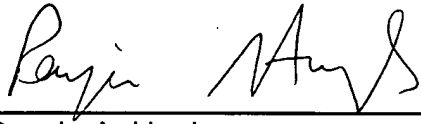
In view of the foregoing remarks, Applicant submits that this claimed invention, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicant therefore requests the reconsideration and reexamination of the application, and the timely allowance of all pending claims.

Please grant any extensions of time required to enter this Amendment and
charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: March 26, 2008

By: 

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